A NEW AMERICAN SUBGENUS AND SPECIES OF AEDES

(Diptera, Culicidæ)

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The writer wishes to take this opportunity of expressing his appreciation to Mr. W. H. W. Komp for his help and criticism in the preparation of the manuscript; helpful criticism by Mr. M. A. Cazier and Mr. B. Brookman is also acknowledged. Thanks are especially due Dr. and Mrs. A. E. Michelbacher and Mr. E. S. Ross, the collectors from whom the specimens were obtained for study.

The description of the subgenus is so arranged that the diagnostic portion includes the main characters used by Edwards (Gen. Insct., Fasc. 194:130, 1932) in his key to the females of the subgenera of Aëdes; thus the reader will be able to refer directly to the most closely allied subgenera.

Kompia Aitken, new subgenus

Wings without a tuft of very long scales at extreme base; tarsal claws toothed on front and middle legs; cerci short; eighth abdominal segment large and not completely retractile, eighth sternite large and prominent; entire body highly ornamented; head mainly clothed with broad, flat scales, but with a median dorsal stripe of narrow scales; post-spiracular setæ absent.

Head without setæ on occiput except for ocular row; eyes narrowly separated above antennæ, space between eyes occupied by narrow scales; antennæ slender in female, verticels moderately long, flagellar segments about equal in length; proboscis slender, slightly longer than fore femora; palpi about one-sixth as long as proboscis. Thorax with anterior pronotal lobes widely separated; dorsocentral setæ (including pre-scutellars) present; spiracular and post-spiracular areas devoid of setæ, the latter area adorned with patch of broad, flat scales; sternopleural setæ sparse; lower mesepimeral setæ absent; meron with upper margin above level of base of hind coxæ; scutellum trilobed, scales broad on median lobe, extremely narrow on lateral lobes (each bearing setæ); postnotum bare; wing scales predominantly narrow, upper surface of stem vein without hairs, squama completely fringed, anal vein reaching well beyond base of cubital fork; pulvilli absent. Legs with toothed claws on fore and mid tarsi. Abdomen pointed.

Type: Aëdes (Kompia) purpureipes Aitken, new species.

Although lacking postspiracular bristles, this subgenus belongs in the genus Aëdes, on the basis of the characters outlined above. Unfortunately the absence of males and larvæ prevents determining its true relationship. Kompia appears to be most closely related to the subgenera Finlaya and Howardina, particularly the former, from which it may be separated by the absence of postspiracular bristles; it also differs from Howardina in this character, as well as by having toothed tarsal claws on the front and middle legs of the female. The writer takes great pleasure in naming this subgenus in honor of Mr. W. H. W. Komp, Senior Medical Entomologist, U. S. Public Health Service, who has done much to further our knowledge of neotropical mosquitoes, and who confirmed the writer's opinion concerning the status of this mosquito.

Aëdes (Kompia) purpureipes Aitken, new species

Female. Head with proboscis and palpi clothed with appressed black scales having dark, metallic blue shade in certain lights; clypeus bare, shiny black; antennæ black, tori shiny black with patch of broad silvery scales mesially; occiput with dark integument, heavily clothed with scales arranged in the following pattern: a dark, metallic clump on lateral ocular margins surrounded by pale band (the scales in front silvery and those in back golden). a submedian dark, metallic purple clump and a median patch of narrow, golden scales which become silvery between the eyes, a clump of erect, forked, black scales posteriorly, ocular margins bordered by few black setæ. Thorax with integument ochraceous orange; mesonotum golden-yellow, with two dark submedian longitudinal stripes from anterior margin to scutellum, and with two dark lateral stripes extending from scutellum half way to anterior margin, the two submedian dark stripes separated anteriorly by a median line of golden scales half the width of each stripe, posteriorly by the bare ante-scutellar space which is lined laterally with silvery scales, submedian dark stripes with few dark dorsocentral setæ, stouter, longer and more numerous posteriorly, margins of mesonotum lined with pale setæ, more numerous above wing-base; scutellum with median lobe bearing clump of broad silvery scales and six long, pale setæ, lateral lobes with small patch of narrowlylinear, elongate, black scales and five or six very long pale setæ; anterior pronotal lobes capped with broad silvery scales and clump of variably colored setæ (about 15), posterior pronotum with patch of broad silvery scales followed by five variably colored setæ; pleuræ (inclusive of pronotum and coxæ) marked by three longitudinal silvery white stripes, formed of broad scales on proepisternum, mesanepisternum, sternopleuron and mesepimeron, setæ

(pale) arranged as follows: proepisternum (about six), mesanepisternum without setæ, sternopleuron with two groups, upper and lower (about three each), prealar area (about seven), upper mesepimeron (about 15); coxæ yellow, clothed with broad silvery scales, darker ventrally, also each with a row of pale and dark setæ; trochanters yellow, with a few silvery scales; femora yellow on basal third, the pale color tending to run out to the apex on inner side of first two pairs of legs, remainder of femora adorned with dark, metallic purple scales, apex of femora with a patch of white scales; tibiæ and tarsi clothed with dark metallic scales varying from purple to spectrum blue (depending on light), pale bands absent; few pale setæ occurring along length of leg; tarsal claws of first two pairs of legs with tooth, those of hind legs simple, formula 1.1-1.1-0; wings clothed with narrow, dark scales, which in certain lights take on the bluish-purple color of the legs (this color also visible on wing membrane); halteres yellow, with few pale silvery and dark scales on knob. Abdomen with ochraceous yellow integument, adorned with broad, brown scales which in certain lights are metallic purple and in others yellowish; tergites with slight indications of narrow, pale basal bands which expand laterally into triangular areas of silvery scales, pale setæ present on first tergite and apices of following tergites; sternites with brown scales similar to those on dorsum, pale setæ present on disc as well as apices of sternites.

Holotype, female, No. 5155, Calif. Acad. Sci., Ent., collected at Triunfo, Distrito del Sur, Baja California, México, July 7, 1938, by A. E. Michelbacher and E. S. Ross. Paratypes, three females from five miles west of San Bartolo, Distrito del Sur, July 13, 1938, and one female from Miraflores, Distrito del Sur, July 8, 1938, by A. E. Michelbacher and E. S. Ross. Paratypes (unfortunately rather badly rubbed) deposited in the California Academy of Sciences, United States National Museum, University of California and the Escuela Nacional de Ciencias Biologicas, México, D.F. All collections were made at night.

An additional female specimen has recently come to hand, collected by Mr. E. S. Ross at Patagonia, Santa Cruz County, in southern Arizona, August 8, 1940. Although rather badly rubbed, the specimen appears identical with those from Lower California. The postspiracular setæ are absent, the pleural bands formed by the silvery scale patches are in evidence, the thorax is distinctly yellow and retains a few of the yellow mesonotal scales, and the legs are clothed with dark scales, but they are

not so markedly metallic purple. The specimen, caught in the daytime, was in the act of biting.

Dr. Alan Stone, U. S. National Museum, has kindly compared the specimens from Lower California and Arizona with Dyar's types of Aëdes muelleri (Ins. Insc. Mens., 8:81, 1920), from the vicinity of México City, México, and A. iridipennis (Ins. Insc. Mens., 10:92, 1922), from the Chiricahua Mountains, Arizona, and finds them to be very different; the absence of postspiracular bristles is alone sufficient to distinguish the former.

OBITUARY

During the past year entomology has lost several of its most distinguished workers. Of the younger entomologists, Grace Adelbert Sandhouse, aculeate Hymenopterist in the Bureau of Insect Identification of the U. S. D. A., died on Nov. 9, 1940, at the age of 44 and F. W. Edwards, Dipterist and Deputy Keeper of Entomology at the British Museum (Natural History), died on Nov. 15, 1940, at the age of 46.

Older scientists whose names have been intimately associated with American entomology for the last half century include: W. S. Blatchley, naturalist and author of several indispensible insect manuals, who died on May 28, 1941, at the age of 81; Samuel Henshaw, Coleopterist, bibliographer, and director emeritus of the Museum of Comparative Zoology, who died on Feb. 5, 1941, at the age of 89; Ch. Wardell Stiles, Parasitologist and for many years secretary of the International Commission on Zoological Nomenclature, who died on Jan. 24, 1941, at the age of 73; Charles William Leng, Coleopterist, cataloguer, and director of the Public Museum, Staten Island, N. Y., who died on Jan. 25, 1941, at the age of 81; and Clarence P. Gillette, authority on the Aphididæ and director emeritus of the Colorado Agricultural Experiment Station, who died on Jan. 4, 1941, at the age of 81.

Contributors to early California entomology include: Gustavus A. Eisen, early collector in Lower California and one of the persons responsible for the introduction of the Blastophaga into California, who died on Oct. 29, 1941, at the age of 93, and Edward M. Ehrhorn, charter member of the Pacific Coast Entomological Society and one of the pioneers in Plant Quarantine work in San Francisco, who died on Feb. 11, 1941, at the age of 79.—ROBERT L. USINGER.